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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/590,779 | 08/25/2006 | Takafumi Kawano | 930055-2047 | 1161 |

7590 12/31/2008
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| EXAMINER |
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LE, HOA T

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| ART UNIT | PAPER NUMBER |
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1794

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| MAIL DATE | DELIVERY MODE |
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12/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/590,779 | Applicant(s) KAWANO ET AL. | |
| | Examiner H. (Holly) T. Le | Art Unit 1794 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

2. Applicant's election of claims 1-12 with traverse is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Accordingly, claims 13-18 stand withdrawn from consideration as drawn to a non-elected invention. It is suggested that the forthcoming reply include cancellation of nonelected claims or other appropriate action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 4-11 are rejected under 35 U.S.C. 102(b) as being anticipated by KONO et al (JP 2004-026543).*

KONO teaches a ceramic aggregate comprising dielectric particles having a composition of $\text{ZnTiO}_3/\text{Zn}_2\text{TiO}_4(\text{BaO-TiO}_2\text{-Nd}_2\text{O}_3)$ wherein the particles are formed by wet blending a composite of $\text{BaO-TiO}_2\text{-Nd}_2\text{O}_3$ with ZnTiO_3 or Zn_2TiO_4 . See paragraphs

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[0028]-[0029]. Therefore, the $\text{ZnTiO}_3/\text{Zn}_2\text{TiO}_4$ would necessarily be present on the surface of the dielectric particles. The composition is calcined at 900-1200 Celsius degrees. See paragraph [0029]. With regard to claim 11, a glass component is present in the composition. See paragraph [0029].

Claim Rejections - 35 USC § 103

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over KAMEYAMA et al (JP 08-239262).^{**}

^{*} Copy provided by Applicant.

^{**} Copy provided by Applicant.

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KONO teaches the claimed ceramic aggregate and composition as discussed above. However, the glass component in the composition as taught by KONO has a lower concentration of ZnO and higher B₂O₃ than those of the claimed composition. See KONO, table 1. Kameyama teaches a dielectric ceramic composition comprising BaO-TiO₂-Nd₂O₃ as a main component and a glass component comprising 45-70wt.% of ZnO, 5-13wt.% of B₂O₃, 7-40wt.% of SiO₂, and 8-20wt.% of Al₂O₃. The composition is said to be sinterable at low temperature. See Kameyama, abstract. Therefore, one of ordinary skill in the art would have been motivated to replace the glass component in the composition of KONO with the glass component taught by Kameyama in order to receive a ceramic composition with improved sinterability at lower temperature.

Response to Arguments

6. Applicant's arguments with respect to claims 1 and 4-12 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. (Holly) T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 12:30 a.m. to 9:00 p.m. (EST), Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. (Holly) T. Le/
Primary Examiner, Art Unit 1794

December 29, 2008